

BookletChart™

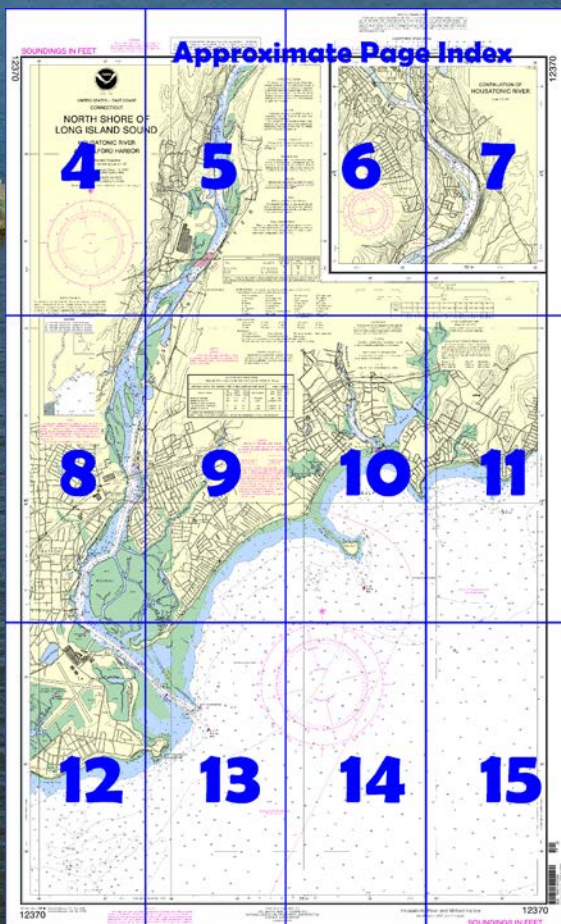
North Shore of Long Island Sound – Housatonic River and Milford Harbor **NOAA Chart 12370**



A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

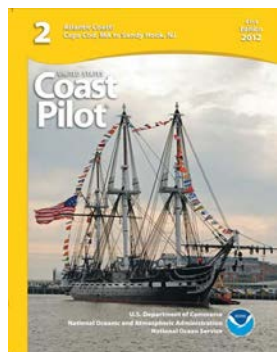
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12370>.



(Selected Excerpts from Coast Pilot)

Pond Point, about 5 miles southwestward of the New Haven Harbor entrance, has a rocky shoal with little depth over the greater part of it that extends about 0.3 mile southward. It is marked by a buoy. A prominent white mast is on the point.

Welches Point, 0.8 mile westward of Pond Point, forms the east side of the entrance of the Gulf. A reef extends 0.2 mile southward from the point and is marked by a buoy. Several scattered rocks extend

a southeasterly direction for about 0.5 mile from the buoy.

The Gulf, a bight between Welches Point and Charles Island, about 6.5 miles westward of New Haven Harbor entrance, affords anchorage in 6

to 15 feet and is sheltered in all but southerly and southeasterly winds. The entrance is clear. The shoaling is gradual, and soundings are the best guide on the northwest side of the bight; the western side of Welches Point and the reefs around Charles Island extending to the mainland should be approached with caution, as the shoaling is abrupt.

Milford Harbor, comprising the lower portion of the **Wepawaug River**, is entered at the mouth of the river between two jetties at the head of The Gulf. The westerly jetty extends southward from **Burns Point**, and the easterly jetty is marked by Milford Harbor Light 10. The harbor is used for recreational boating, and occasionally for the receipt of shellfish and fish. The National Marine Fisheries Service, U.S. Department of Commerce, maintains a laboratory and research vessel base on the west side of the harbor, about 0.2 mile northward of Burns Point.

A dredged channel leads from The Gulf through the jettied entrance to a point about 400 feet above the town wharf, 0.6 mile above Burns Point. In 2008, the controlling depths were 5.6 feet (6.7 feet at midchannel) to the Town Dock and 6.5 feet in the anchorage basin along the west side of the channel. The channel is marked by a light and lighted and unlighted buoys.

Small-craft facilities.—Milford Harbor has several small-craft facilities. (See the small-craft facilities tabulation on chart 12364 for services and supplies available.)

Charles Island, on the southwest side at the entrance to The Gulf, is low and partly covered with trees. The island is connected to the mainland by **The Bar**, a narrow neck about 0.5 mile long and surrounded by rocks awash and shoals. A buoy marks the end of a shoal that extends 250 yards east-northeastward from the island, and a lighted bell buoy marks the end of a rocky area that extends 0.4 mile southward from the island. Northward of Charles Island is a good anchorage in 10 to 16 feet, sheltered from southerly to southwesterly winds.

Between Charles Island and **Stratford Point**, about 3 miles southwestward, several summer resorts are along the shore and the Housatonic River empties into Long Island Sound just above the point. The shoals which extend southward from Stratford Point toward Stratford Shoal Light (see chart 12354) consist of narrow ridges of hard sand with deeper water between, and have oyster beds marked with stakes. Depths of 12 feet or less extend 1 mile offshore.

Stratford Point Light (41°09'07"N., 73°06'12"W.), 52 feet above the water, is shown from a white conical tower, with brown band midway of its height, from the southerly part of the point.

Housatonic River rises in the Berkshire Hills of western Massachusetts and Connecticut, and empties into Long Island Sound about 10 miles southwestward of the New Haven Harbor entrance. The river is joined by the nonnavigable **Naugatuck River** in the vicinity of Derby, CT. Housatonic River is navigable to a point about 1 mile above Shelton, CT, where it is closed by a power dam. The head of navigation for all practical purposes is at the towns of Derby and Shelton, 11.5 miles above the entrance. Small vessels can anchor in the river abreast of Stratford, where the channel has an available width of about 500 feet. Navigation above Devon is limited to recreational boating.

On the east side of the entrance to Housatonic River, a breakwater extends out from **Milford Point** across the bar and is marked at its south end by Housatonic River Breakwater Light 2A. The inner section of the breakwater is awash at high water.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Boston

Commander
1st CG District
Boston, MA

(617) 223-8555

Table of Selected Chart Notes


PLANE COORDINATE GRID
(based on NAD 1927)
Connecticut State Grid is indicated by dotted ticks at 5,000 foot intervals.

HEIGHTS
Heights in feet above Mean High Water.

Mercator Projection
Scale 1:20,000 at Lat. 41° 12'
North American Datum of 1983
(World Geodetic System 1984)
SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

POLLUTION REPORTS
Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).


HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.347" northward and 1.616" eastward to agree with this chart.

WARNING
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: 

NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Meriden, CT	WXJ-42	162.400 MHz
New York, NY	KWO-35	162.550 MHz
Riverhead, NY	WXM-80	162.475 MHz

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
This chart falls entirely within the limits of a No-Discharge Zone (NDZ). Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

TIDAL INFORMATION				
PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Milford Harbor	(41°13'N/073°03'W)	6.9	6.6	0.2
	(41°18'N/073°04'W)	7.6	7.2	0.2

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from: <http://tidesandcurrents.noaa.gov/>. (May 2012)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B back	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Bds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HOUSATONIC RIVER CHANNEL DEPTHS						
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS- REPORT OF APR 2012						
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES) DEPTH (FEET)
ENTRANCE CHANNEL	13.0	13.0	13.1	10-11	200	1.06 18
THENCE TO BUOY 19	15.6	13.1	10.9	10-11	200-250	1.56 18
THENCE TO BASCULE BRIDGE						
IN 41°12'01.5"N, 73°06'38.4"W.	2.9	2.4	6.0	10-11	A 200-250	.89 18
THENCE TO BUOY 29	4.0	4.3	7.4	10-11	A 200-370	.90 18

A. EXCEPT FOR NARROWING AT BRIDGES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

Formerly C&GS 219

SOUNDINGS IN FEET

12370



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST
CONNECTICUT

NORTH SHORE OF LONG ISLAND SOUND

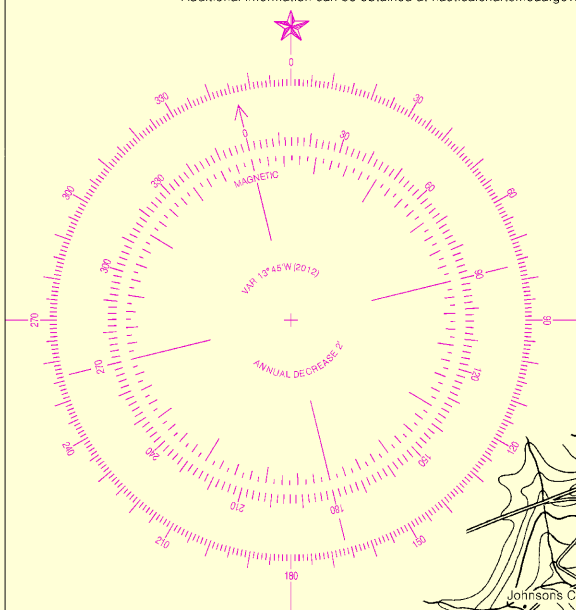
HOUSATONIC RIVER
AND MILFORD HARBOR

Mercator Projection
Scale 1:20,000 at Lat. 41° 12'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.



SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, *United States Coast Pilot*.

SOURCE

A 1990-2003 NOS Surveys full bottom coverage
B4 1900-1939 NOS Surveys partial bottom coverage
B5 Pre-1900 NOS Surveys partial bottom coverage

Joins page 8

JOINS INSET 05' 50' 40' 30'

The horizon is North America for charting purposes to the World Geodetic System 1984 datum average of 0.34 to agree with the datum.

Temporary navigation are shown in Local Notice to Mariners. During some periods, they may be replaced by other aids. See U.S. Coast Pilot.

Consult U.S. Coast Pilot for supplemental navigation.

Racing buoys are not shown. Obtained from the U.S. Coast Pilot. Offices as indicated. Not all listed in the U.S. Coast Pilot.

Mariners are responsible for proper structures shown.

Radar reflected floating aids to navigation and reflector identification omitted from this chart.

NO-DISCHARGE
This chart falls entirely within the No-Discharge Zone (NDZ). Under the Clean Water Act, vessels operating within a NDZ are completely prohibited from discharging, into the water, any oil, hazardous material, garbage, or other pollutants. Marine sanitation devices (MSDs) are required to be used or, if not used, the vessel must be equipped with a pump-out station. For more information, consult the U.S. Coast Guard. Additional information on requirements may be obtained from the U.S. Coast Guard or the U.S. Environmental Protection Agency (EPA). (see note Z)

NO-DISCHARGE ZONE
(see note Z)

TIDAL INFORMATION

PLACE	NAME	(LAT/LONG)
Milford Harbor		(41°13'N/073°03'W)
Shelton		(41°18'N/073°04'W)

Dashes (---) located in datum columns indicate unavailable datum tide predictions, and tidal current predictions are available on the Internet (May 2012)

ABBREVIATIONS

(For complete list of Symbols and Abbreviations, see the U.S. Coast Pilot.)
Aids to Navigation (lights are white unless otherwise noted)
AERO aeronautical
Al alternating
B black
Bn beacon
C can
DIA diaphane
F fixed
F flashing
G green
IQ interrupted light
Iso isophase
LT HO light house
M minute
MICRO TR micro tripper
Mkr marker

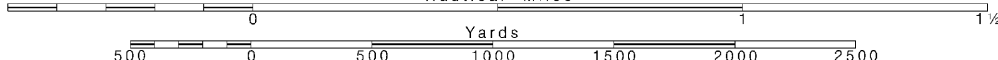
Bottom characteristics:
Bds boulders
bk broken
Clay clay
Co coral
G gravel
Grn grass

Miscellaneous:

Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

See Note on page 5.



4

Note: Chart grid lines are aligned with true north.

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocsd.nod.noaa.gov/ndrs/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

LOGARITHMIC SPEED SCALE



To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

19, 1st Ed., Feb. 1919 C-1919-190 KAPP 2185

20° 10' 73° 04' 50'

HORIZONTAL DATUM

Horizontal reference datum of this chart is the Mean Datum of 1983 (NAD 83), which purposes is considered equivalent to the Geodetic System 1984 (GWS 84). Positions referred to the North datum of 1927 must be corrected an 347' northward and 1.616' eastward on this chart.

CAUTION

Any changes or defects in aids to navigation are not indicated on this chart. See the U.S. Coast Guard Light List for information concerning aids to navigation.

AIDS TO NAVIGATION

U.S. Coast Guard Light List for information concerning aids to navigation.

RACING BUOYS

Buoys within the limits of this chart are shown hereon. Information may be obtained from the U.S. Coast Guard District Office and other private buoys are in the U.S. Coast Guard Light List.

CAUTION

Boats are warned to stay clear of the propeller and surrounding navigational light shown thus:

RADAR REFLECTORS

Reflectors have been placed on many vessels to navigation. Individual radar identification on these aids has been shown thus:

NOTE Z NO-DISCHARGE ZONE, 40 CFR 140

Within the limits of a No-Discharge Zone (NDZ), all vessels are prohibited from discharging any sewage, treated or untreated. All vessels with an installed sewage treatment system (STS) that are navigating, moored, or within a NDZ must have the MSD overboard discharge of sewage. Regulations are in the U.S. Coast Pilot, concerning the regulations and obtained from the Environmental Protection Agency website: http://www.epa.gov/vessel_sewage/.

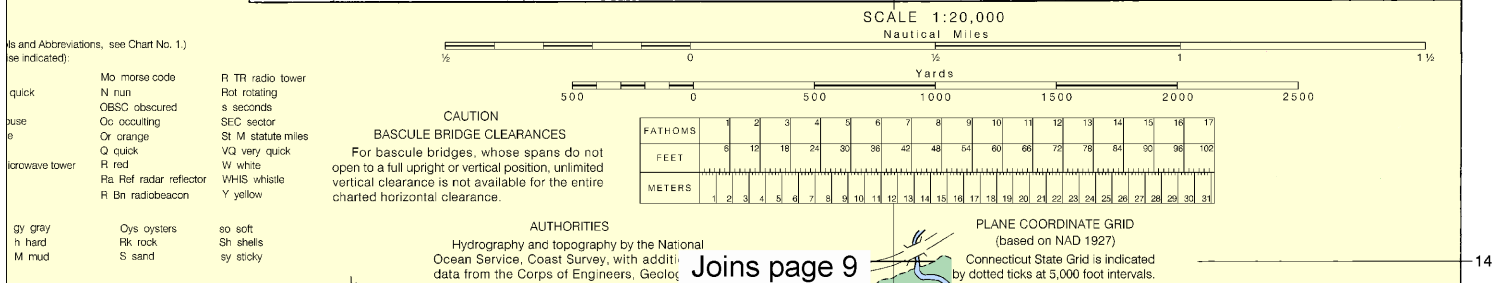
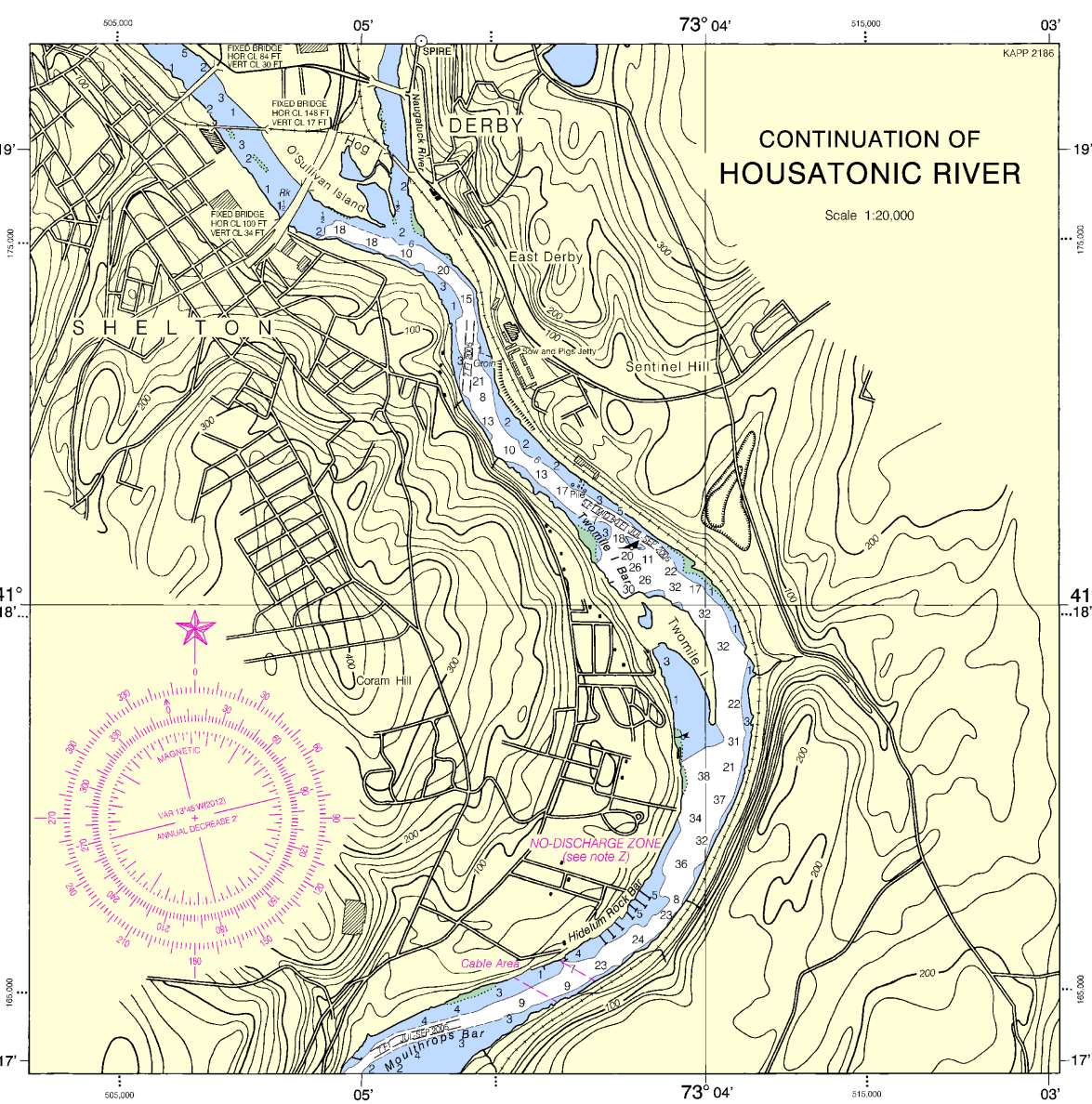
Height referred to datum of soundings (MLLW)		
Mean Higher High Water	Mean High Water	Mean Low Water
feet 6.9	feet 6.6	feet 0.2
7.6	7.2	0.2

Values for a tide station. Real-time water levels, Internet from <http://tidesandcurrents.noaa.gov>.

Is and Abbreviations, see Chart No. 1.)
(see indicated)

Mo morse code	R TR radio tower
N run	Rot rotating
OBSC obscured	S seconds
OC occulting	SEC sector
Or orange	St M statute miles
Q quick	VQ very quick
R red	W white
Re Ref radar reflector	WHIS whistle
R Bn radio beacon	Y yellow

gy gray	Oys oysters	so soft
h hard	Rk rock	Sh shells
M mud	S sand	sy sticky



This BookletChart was reduced to 70% of the original chart scale. The new scale is 1:28571. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

Formerly C&GS 219, 1st Ed., Feb.

SOUNDINGS IN FEET



UNITED STATES - EAST COAST
CONNECTICUT

NORTH SHORE OF LONG ISLAND SOUND

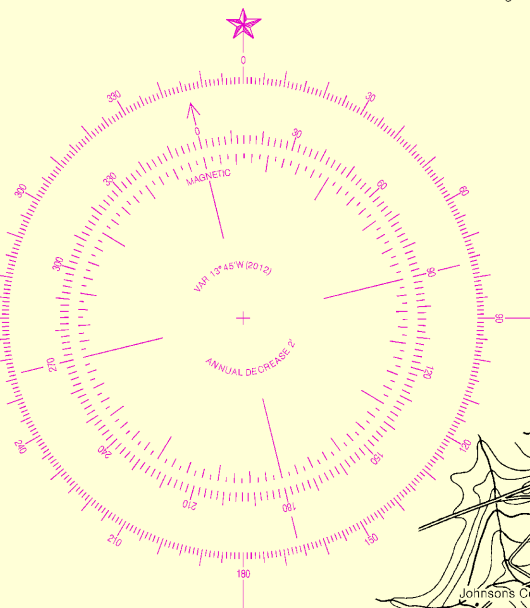
HOUSATONIC RIVER
AND MILFORD HARBOR

Mercator Projection
Scale 1:20,000 at Lat. 41°12'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

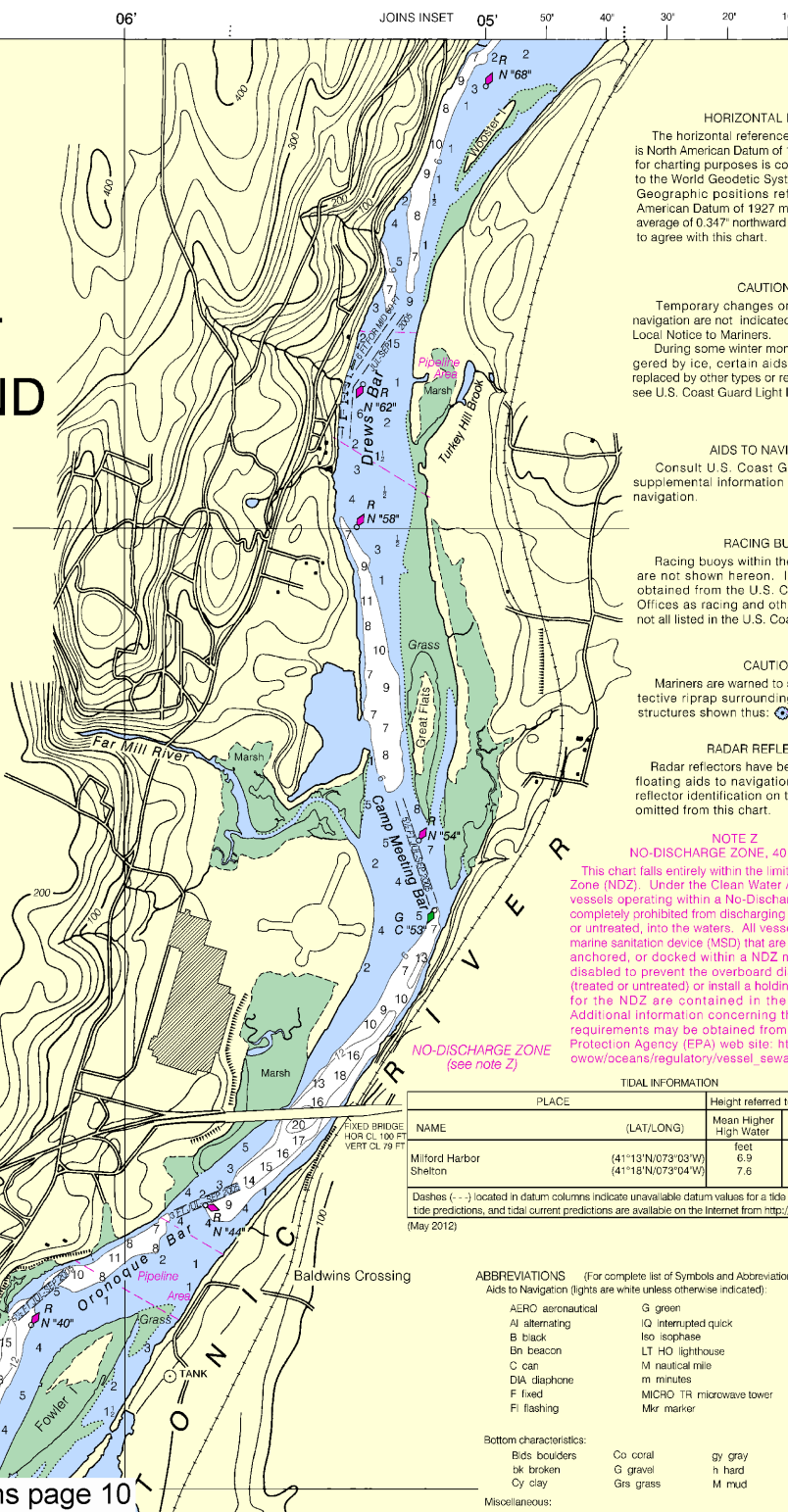


SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, *United States Coast Pilot*.

SOURCE

A 1990-2003 NOS Surveys full bottom coverage
B4 1900-1939 NOS Surveys partial bottom coverage
B5 Pre-1900 NOS Surveys partial bottom coverage



HORIZONTAL D

The horizontal reference is North American Datum of 1983 for charting purposes is con to the World Geodetic System Geographic positions refer to the American Datum of 1927 mu average of 0.347' northward to agree with this chart.

CAUTION

Temporary changes or navigation are not indicated Local Notice to Mariners. During some winter mont gered by ice, certain aids replaced by other types or re see U.S. Coast Guard Light L

AIDS TO NAVI

Consult U.S. Coast Gu supplemental information o navigation.

RACING BU

Racing buoys within the are not shown hereon. In obtained from the U.S. Co Offices as racing and oth not all listed in the U.S. Coa

CAUTION

Mariners are warned to a tective riprap surrounding structures shown thus:

RADAR REFLE

Radar reflectors have be floating aids to navigation reflector identification on th omitted from this chart.

NOTE Z

NO-DISCHARGE ZONE, 401
This chart falls entirely within the limits Zone (NDZ). Under the Clean Water A vessels operating within a No-Disch completely prohibited from discharging or untreated, into the waters. All vesse marine sanitation device (MSD) that are anchored, or docked within a NDZ m disabled to prevent the overboard dis (treated or untreated) or install a holding for the NDZ are contained in the Additional information concerning the requirements may be obtained from: Protection Agency (EPA) web site: http://www.epa.gov/oceans/regulatory/vessel_sewa

TIDAL INFORMATION

NAME	PLACE	(LAT/LONG)	Height referred to	
			Mean Higher	High Water
Milford Harbor		(41°13'N/073°03'W)	6.9	
Shelton		(41°18'N/073°04'W)	7.6	

Dashes (---) located in datum columns indicate unavailable datum values for a tide s tide predictions, and tidal current predictions are available on the Internet from <http://www.noaa.gov> (May 2012)

ABBREVIATIONS

(For complete list of Symbols and Abbreviation Aids to Navigation (lights are white unless otherwise indicated):
AERO aeronautical G green
A/ alternating I/ interrupted quick
B black ISO isophase
Bn beacon LT HO lighthouse
C can m nautical mile
DIA diaphone m minutes
F fixed MICRO TR microwave tower
Fl flashing Mk marker

Bottom characteristics: Bds boulders Co coral gy gray
bk broken Gs gravel h hard
Cy clay Gs grass M mud

Miscellaneous:

Joins page 5

Joins page 10

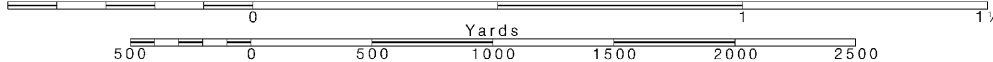
6

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

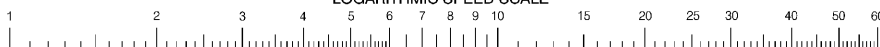
See Note on page 5.



PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocedata.nod.noaa.gov/idsr/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

LOGARITHMIC SPEED SCALE



To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

1919 C-1919-190 KAPP 2185

73° 04' 50'

DATUM
The datum of this chart is 1983 (NAD 83), which is considered equivalent to the datum of the 1984 (WGS 84). The datum of the North must be corrected and 1.616' eastward.

NOTES
For defects in aids to navigation, see this chart. See also the list of aids to navigation on page 11.

NOTES
When the end of a line is removed, the line is removed. For details, see the list of aids to navigation on page 11.

NOTES
Guard Light List for the area of this chart is on page 11.

NOTES
The limits of this chart are shown by the dashed line. Information may be obtained from the Coast Guard District Office for private buoys and aids to navigation. For details, see the list of aids to navigation on page 11.

NOTES
Stay clear of the proposed navigational light. The light is shown by a star symbol.

NOTES
Beacons have been placed on many of the aids to navigation. Individual radar beacons have been placed on many of the aids to navigation.

NO-DISCHARGE ZONE
Under 33 CFR 140.101, it is a No-Discharge Zone (NDZ) under Act, Section 312, all large Zone (NDZ) are designated as No-Discharge Zones. No sewage, treated or untreated, may be discharged into the water within the NDZ. The NDZ is shown by a pink star symbol. The NDZ is shown by a pink star symbol. The NDZ is shown by a pink star symbol.

to datum of soundings (MLLW)		Mean High Water	Mean Low Water
feet	feet	6.6	0.2
meters	meters	7.2	0.2

Station: Real-time water levels: <http://tidesandcurrents.noaa.gov>

See Chart No. 1.

Mp Morse code
N run
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
Rn radio beacon

R TR radio tower
Rot rotating
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Oys oysters
Rk rock
S sand

so soft
Sh shells
sy sticky

CAUTION
BASCULE BRIDGE CLEARANCES
For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

AUTHORITIES
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey and U.S. Coast Guard.

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SCALE 1:20,000

Nautical Miles

Yards

1 1/2

2 500

3 1000

4 1500

5 2000

6 2500

7 3000

8 3500

9 4000

10 4500

11 5000

12 5500

13 6000

14 6500

15 7000

16 7500

17 8000

18 8500

19 9000

20 9500

21 10000

22 10500

23 11000

24 11500

25 12000

26 12500

27 13000

28 13500

29 14000

30 14500

31 15000

32 15500

33 16000

34 16500

35 17000

36 17500

37 18000

38 18500

39 19000

40 19500

41 20000

42 20500

43 21000

44 21500

45 22000

46 22500

47 23000

48 23500

49 24000

50 24500

51 25000

52 25500

53 26000

54 26500

55 27000

56 27500

57 28000

58 28500

59 29000

60 29500

61 30000

62 30500

63 31000

64 31500

65 32000

66 32500

67 33000

68 33500

69 34000

70 34500

71 35000

72 35500

73 36000

74 36500

75 37000

76 37500

77 38000

78 38500

79 39000

80 39500

81 40000

82 40500

83 41000

84 41500

85 42000

86 42500

87 43000

88 43500

89 44000

90 44500

91 45000

92 45500

93 46000

94 46500

95 47000

96 47500

97 48000

98 48500

99 49000

100 49500

101 50000

102 50500

103 51000

104 51500

105 52000

106 52500

107 53000

108 53500

109 54000

110 54500

111 55000

112 55500

113 56000

114 56500

115 57000

116 57500

117 58000

118 58500

119 59000

120 59500

121 60000

122 60500

123 61000

124 61500

125 62000

126 62500

127 63000

128 63500

129 64000

130 64500

131 65000

132 65500

133 66000

134 66500

135 67000

136 67500

137 68000

138 68500

139 69000

140 69500

141 70000

142 70500

143 71000

144 71500

145 72000

146 72500

147 73000

148 73500

149 74000

150 74500

151 75000

152 75500

153 76000

154 76500

155 77000

156 77500

157 78000

158 78500

159 79000

160 79500

161 80000

162 80500

163 81000

164 81500

165 82000

166 82500

167 83000

168 83500

169 84000

170 84500

171 85000

172 85500

173 86000

174 86500

175 87000

176 87500

177 88000

178 88500

179 89000

180 89500

181 90000

182 90500

183 91000

184 91500

185 92000

186 92500

187 93000

188 93500

189 94000

190 94500

191 95000

192 95500

193 96000

194 96500

195 97000

196 97500

197 98000

198 98500

199 99000

200 99500

201 100000

202 100500

203 101000

204 101500

205 102000

206 102500

207 103000

208 103500

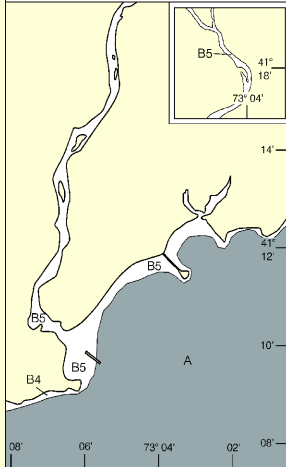
209 104000

210 10450

banding in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A 1990-2003 NOS Surveys full bottom coverage
B4 1900-1939 NOS Surveys partial bottom coverage
B5 Pre-1900 NOS Surveys partial bottom coverage



NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.
Refer to charted regulation section numbers.

DIA diaphone
F fixed
Fl flashing
m minutes
MICRO TR micro
Mkr marker

Bottom characteristics:
Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass

Miscellaneous:
AUTH authorized
ED existence doubtful
Wreck, rock, obstruction, or shoal sweep
(2) Rocks that cover and uncover, with he

Obstr obstruct
PA position ap

POLLUTION REPORT

Report all spills of oil and hazardous substances to the National Response Center at 1-800-424-8802 (toll free), or to the Coast Guard facility if telephone contact is impossible (33 CFR 153).

HOUSATONIC RIVER CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS-REPORT OF APR 2012

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			DATE OF SURVEY	PROJECT
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER		
ENTRANCE CHANNEL	13.0	13.0	13.1	10-11	200-1.0
THENCE TO BUOY 19	15.6	13.1	10.9	10-11	200-250 1.5
THENCE TO BASCULE BRIDGE	2.9	2.4	6.0	10-11	A 200-250 1.5
IN 41°12'01.3"N, 73°06'38.4"W	4.0	4.3	7.4	10-11	A 200-270 1.5
THENCE TO BUOY 29					

A. EXCEPT FOR NARROWING AT BRIDGES.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cables are shown as:

Pipeline Area Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried. Those that were originally buried may become exposed. Mariners should use caution when operating vessels in deep water comparable to their draft in areas where pipelines and cables may exist, and anchoring, cragging, or trawling. Covered wells may be marked by lighted buoys.

Joins page 4

Joins page 12

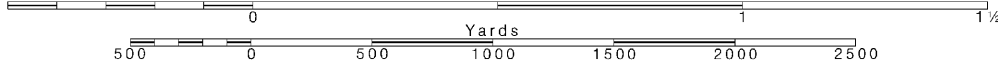
8

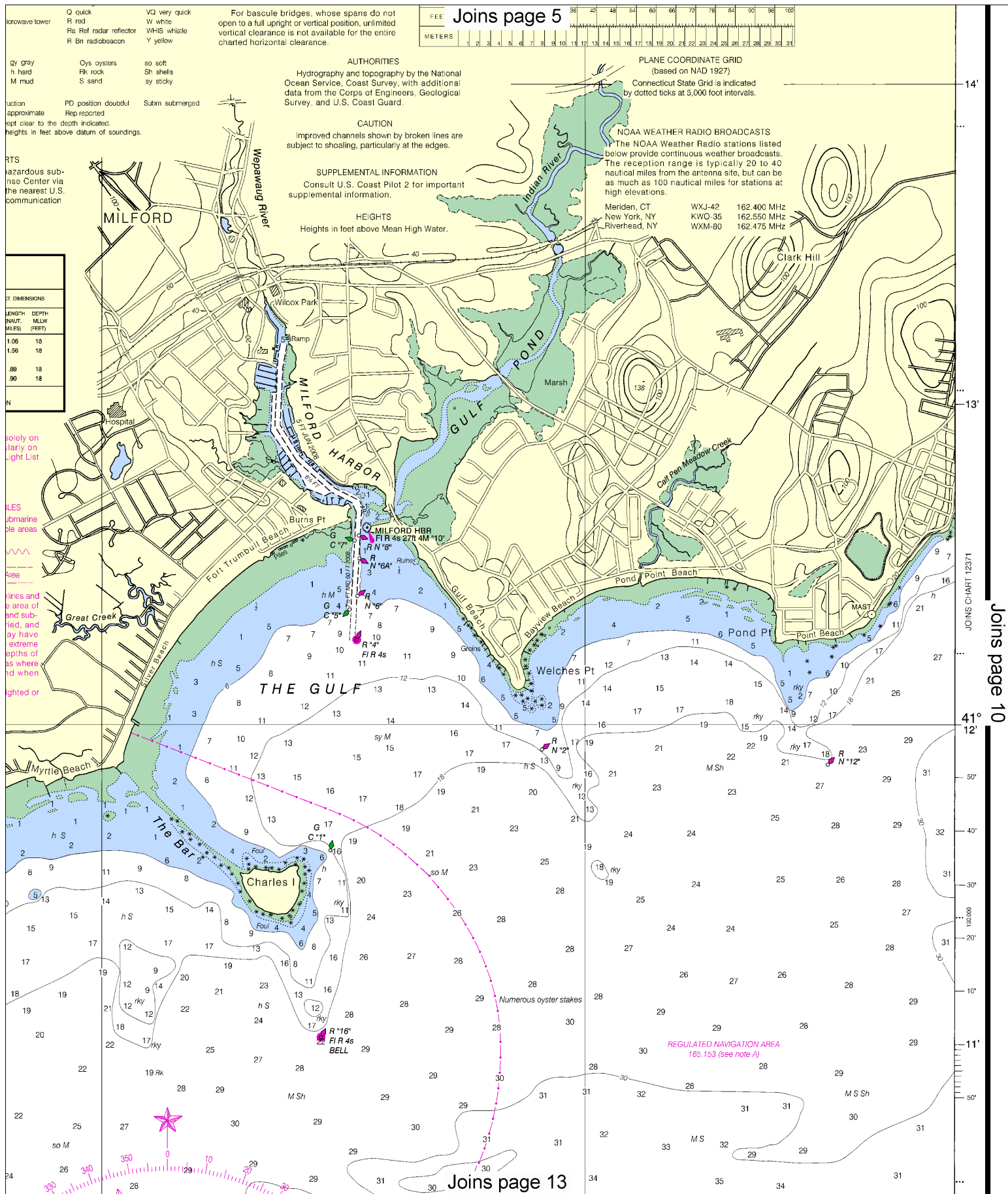
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

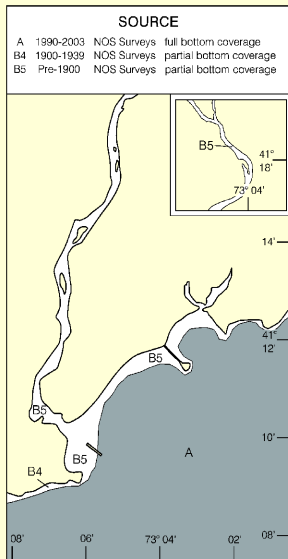
SCALE 1:20,000
Nautical Miles

See Note on page 5.





banding in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.



NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA. Refer to charted regulation section numbers.

Joins page 6

DIA diaphone
 F fixed
 FI flashing

m minutes
 MICRO TR microwave tower
 Mkr marker

Bottom characteristics:
 Bds boulders
 bk broken
 Cy clay
 Co coral
 G gravel
 Gs grass
 gy gray
 h hard
 M mud

Miscellaneous:
 AUTH authorized
 ED existence doubtful
 Wreck, rock, obstruction, or shoal swept clear to the d
 (2) Rocks that cover and uncover, with heights in feet ab

Obstr obstruction
 PA position approximate

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HOUSATONIC RIVER CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS: REPORT OF APR 2012					
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS	
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET) / LENGTH (NAUT. MILES) / DEPTH (MLLW FEET)
ENTRANCE CHANNEL	13.0	13.0	13.1	10-11	200 1.06 18
THENCE TO BUOY 19	15.6	13.1	10.9	10-11	200-250 1.96 18
THENCE TO BASCULE BRIDGE	2.9	2.4	6.0	10-11	A 200-250 .89 18
IN 41°12'01.3"N, 73°06'38.4"W	4.0	4.3	7.4	10-11	A 200-370 .90 18
THENCE TO BUOY 29					

A. EXCEPT FOR NARROWING AT BRIDGES.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

SUBMARINE PIPELINES AND CABLES
 Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, cragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

Joins page 9

Joins page 14

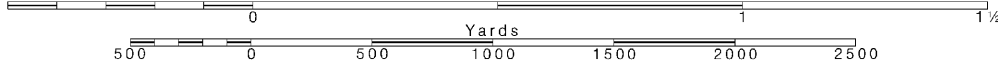
10

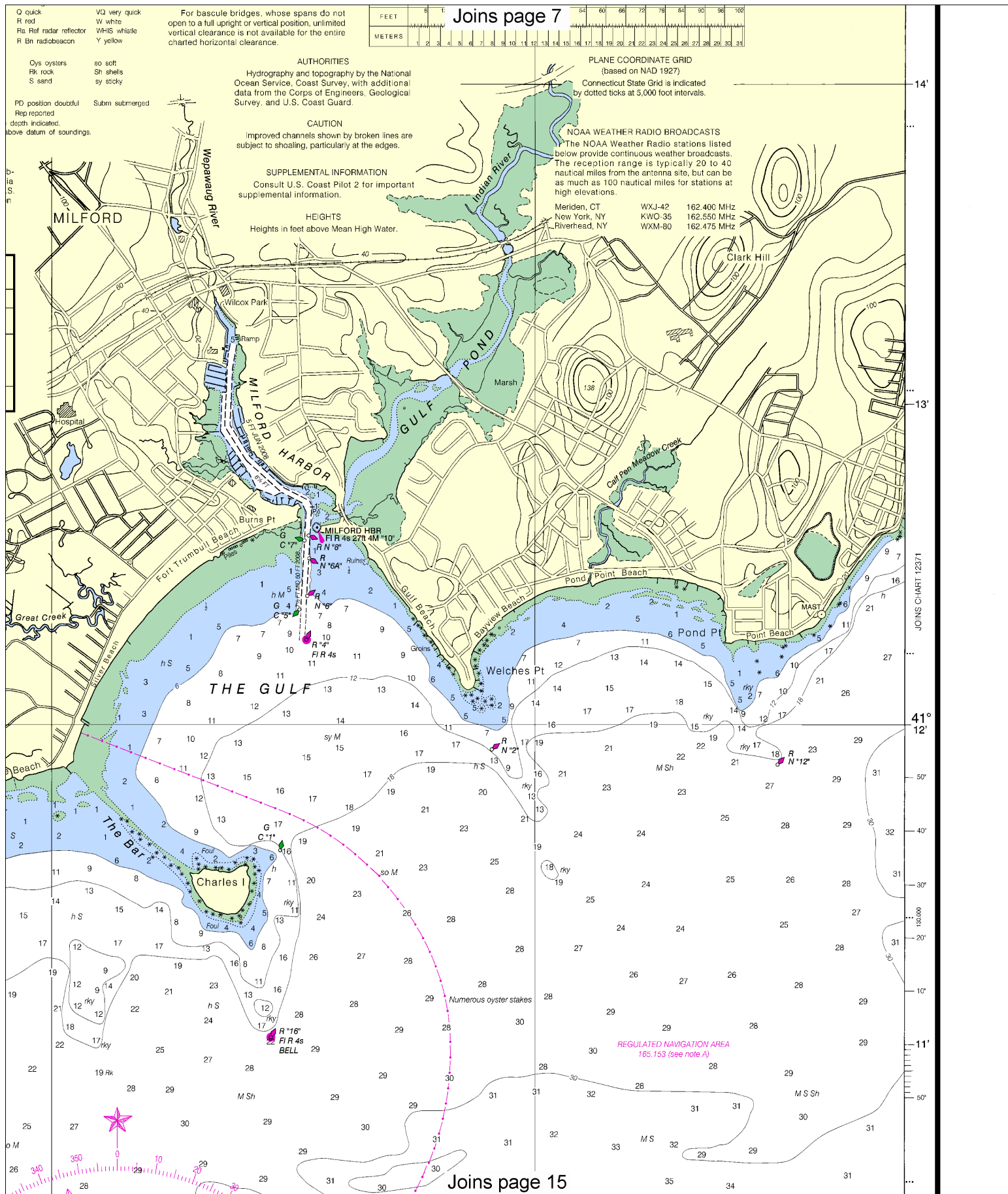
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

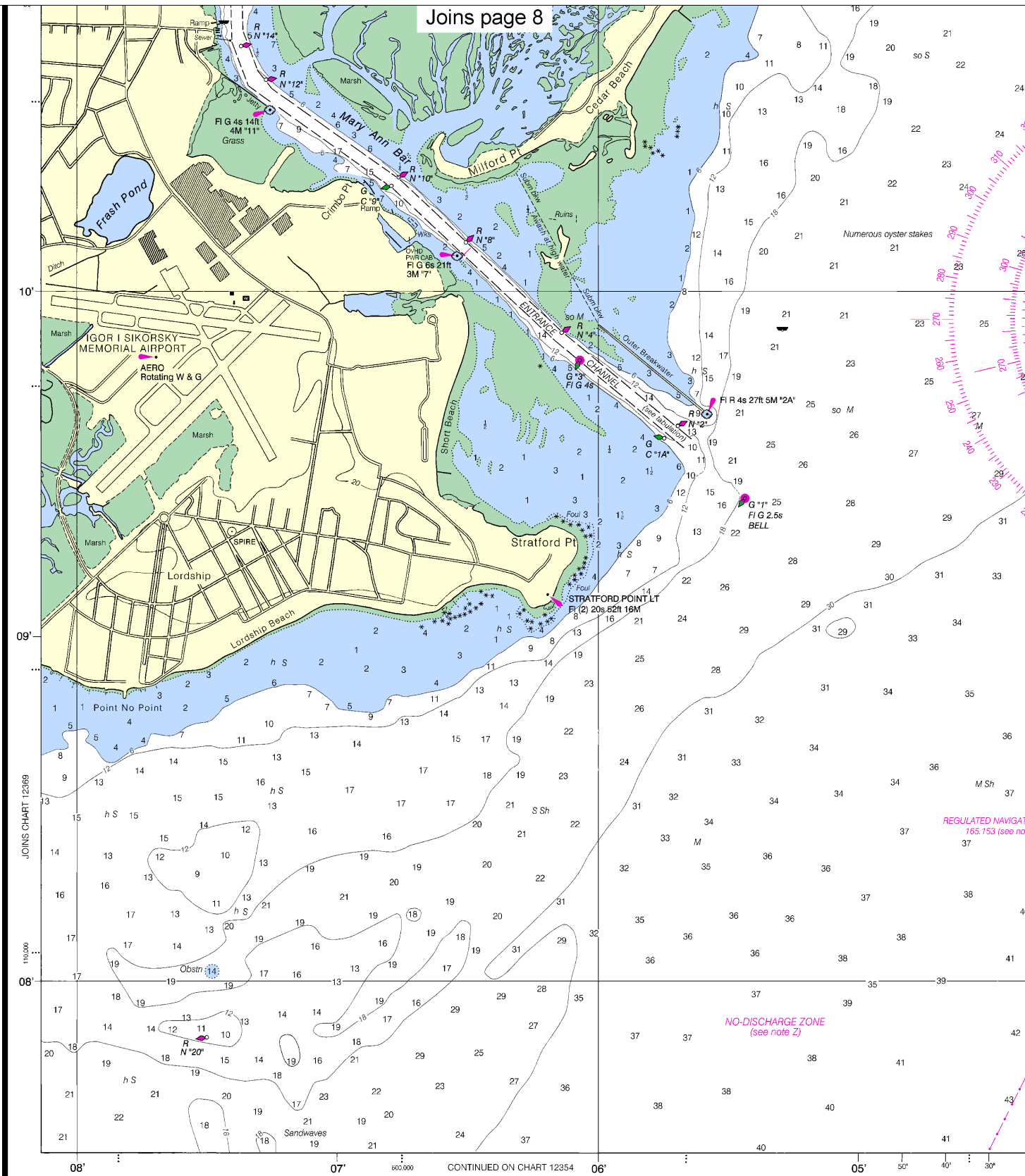
SCALE 1:20,000
 Nautical Miles

See Note on page 5.





Joins page 8



21st Ed., Jun. / 12 ■ Corrected through NM Jun. 2/12
Corrected through LNM May 22/12

12370

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

Published at
U.S. DEPARTMENT OF THE NAVY
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL COAST GUARD

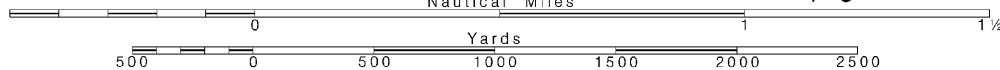
12

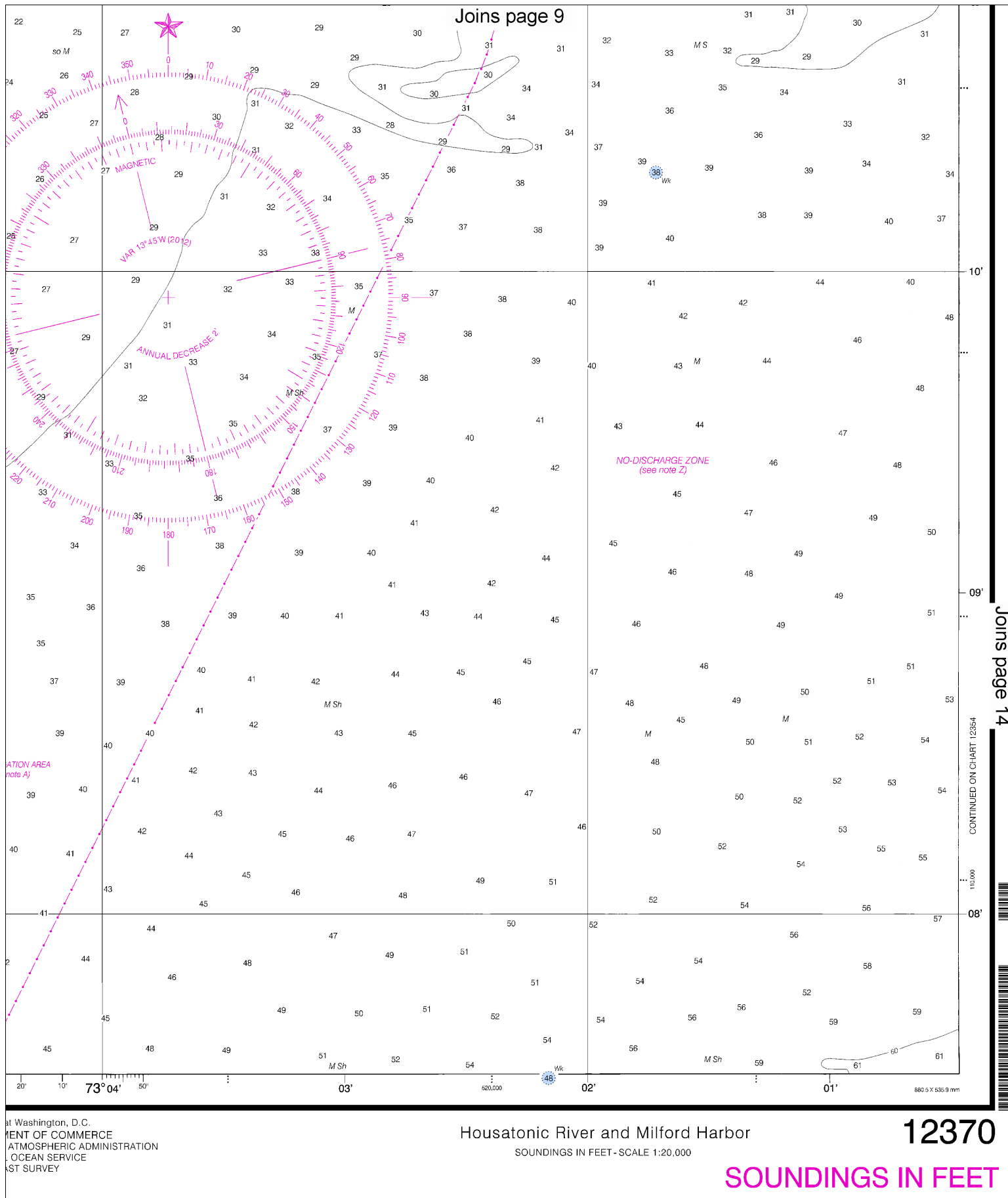
Note: Chart grid lines are aligned with true north.

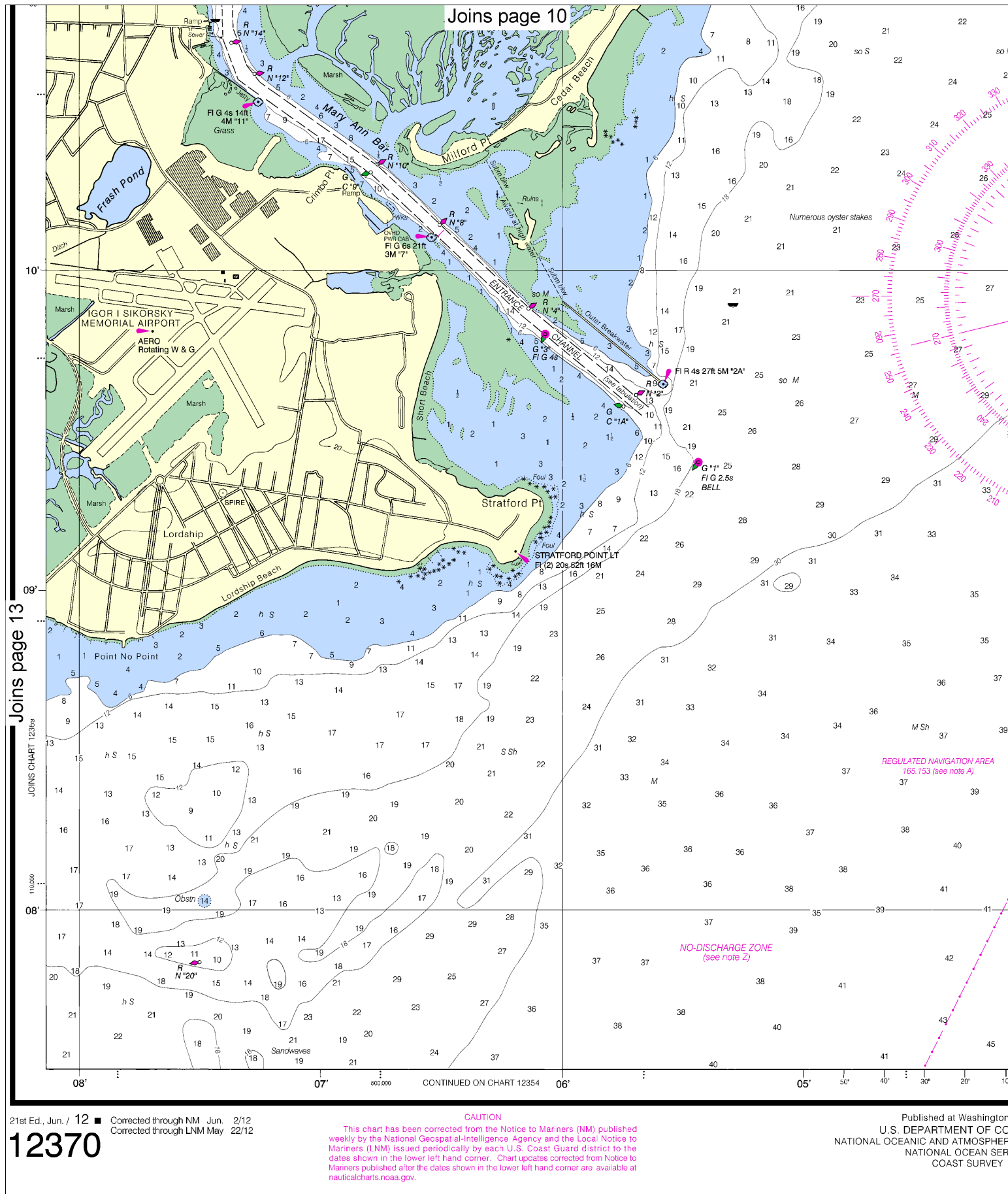
Printed at reduced scale.

SCALE 1:20,000
Nautical Miles

See Note on page 5.







21st Ed., Jun. / 12 ■ Corrected through NM Jun. 2/12
Corrected through LNM May 22/12

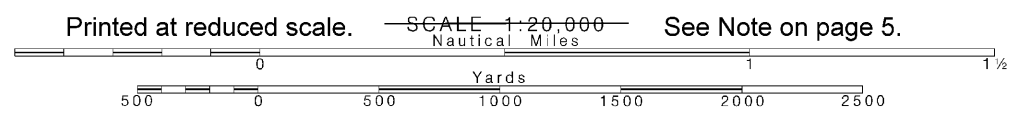
12370

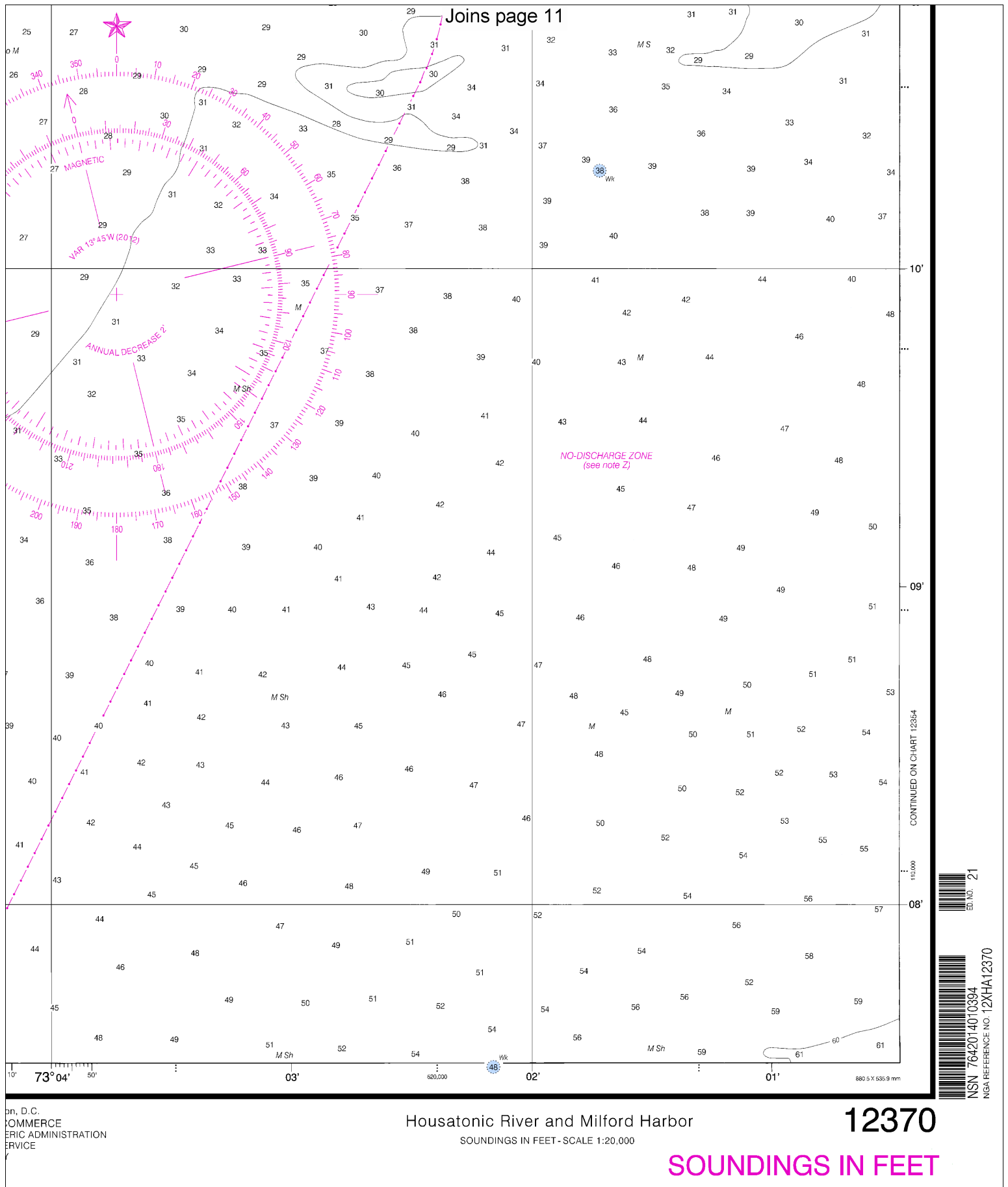
CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

Published at Washington
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

14

Note: Chart grid lines are aligned with true north.





Washington, D.C.
U.S. DEPARTMENT OF
COMMERCE
HYDROGRAPHIC SURVEY
SERVICE

Housatonic River and Milford Harbor
SOUNDINGS IN FEET - SCALE 1:20,000

12370

SOUNDINGS IN FEET

15



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

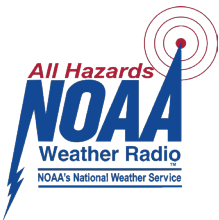
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

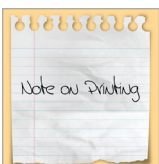
<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



— For the latest news from Coast Survey, follow @nauticalcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey



The Nation's Chartmaker